

## RESEARCH BRIEF

### Research Services

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# Miami-Dade County Public Schools: 2018-2019 Student Performance in the International Baccalaureate Program

#### Results at a Glance

This Research Brief summarizes the performance of Miami-Dade County Public Schools (M-DCPS) students participating in the International Baccalaureate (IB) program. The IB program was offered at six M-DCPS high schools in 2018-2019. Over 3,000 examinations were taken by M-DCPS students in 26 subject areas in 2018-2019. The number of IB examinations taken in M-DCPS increased by one percent from 2017-2018 to 2018-2019. The District's Hispanic students took 68% of all IB examinations in 2018-2019. Overall, the percentage of IB examinations receiving passing scores decreased by one percentage point from 2017-2018 to 2018-2019. At the conclusion of the 2018-2019 school year, 74% of eligible M-DCPS students received IB diplomas, a decrease of three percentage points from 2017-2018.

The International Baccalaureate (IB) program is a rigorous pre-university curriculum and examination program that emphasizes the development of students' intellectual, personal, emotional, and social skills. The IB program provides students with a broad general education while offering specialization based on students' interests and plans. The IB program is recognized at colleges and universities throughout the United States and worldwide.

Three IB programs span the years from kindergarten to pre-university. The programs can be offered individually (the Primary Years Program for students aged 3-12, the Middle Years Program for students aged 11-16, and the IB Diploma Program for students aged 16-19) or as a continuum. A fourth program, the Career-Related Program, is designed to address the needs of students aged 16-19 who are engaged in career-related education. This report focuses on the IB Diploma Program that is offered at M-DCPS senior high schools.

The IB Diploma Program (DP) is a two-year liberal arts curriculum designed to promote understanding of global citizenship. The program encourages students to become critical and compassionate thinkers and informed participants in local and world affairs. The DP curriculum is made up of three core elements and six subject groups. The three core elements are:

- The Theory of Knowledge course, assessed through an oral presentation and a 1,600word essay, encourages students to reflect on the nature of learning and different kinds of knowledge;
- The extended essay, an independent, self-directed research project, culminates in a 4,000-word paper; and
- A Creativity, Action, Service (CAS) component requires students to take part in a range of experiences and at least one project.

The six subject groups are:

- Studies in language and literature;
- Language acquisition;
- Individuals and societies;
- Sciences;
- Mathematics; and
- The arts.

Students may study an additional sciences, individuals and societies, or languages course, instead of a course in the arts. Students take some subjects at the higher level (HL) and some at standard level (SL). Each student takes three to four subjects at HL and the remaining subjects at SL. Students taking courses at HL are expected to demonstrate a greater body of knowledge, understanding, and skills.

Descriptions of courses in the first two subject groups are provided below.

- Studies in language and literature courses are as follows:
  - Language A: Literature These courses introduce students to the analysis of literary texts. Courses are available in 55 languages.
  - Language A: Language and Literature These courses introduce the critical study and interpretation of written and spoken texts from a wide range of literary and non-literary genres. Courses are available in 17 languages.
  - Literature and Performance These courses explore the relationship between literature and theatre. Courses are automatically available in English, and by special request in Spanish and French.
- Language acquisition courses are as follows:
  - Language Ab Initio These courses are for beginners (students who have little or no previous experience of learning the language they have chosen).
  - Language B These courses are intended for students who have some previous experience of learning the language.
  - Classical Languages (Latin or Classical Greek) These courses provide opportunities for students to study the language, literature, and culture of ancient Rome or Greece.

Students in the IB Diploma Program take written examinations in each subject. These examinations assess the extent to which students have mastered advanced academic skills such as analyzing and presenting information; evaluating and constructing arguments; and solving problems creatively. Basic skills are also assessed, including retaining knowledge, understanding key concepts, and applying standard methods. Examinations are scored on a scale of 1 to 7 for each subject, with 7 being highest. A score of 4 is considered a passing score on an IB

examination. Students must earn a total of 24 points on their six IB examinations in order to receive the IB diploma, subject to certain minimum levels of performance across all components of the program and satisfactory completion of the CAS requirement. Students can also be awarded up to three additional points toward the overall diploma score for their combined results on the Theory of Knowledge course and the extended essay.

Six M-DCPS high schools offered the IB program and administered the corresponding IB examinations during the 2018-2019 school year: Coral Gables Senior, Coral Reef Senior, John A. Ferguson Senior, Miami Beach Senior, North Miami Senior, and South Dade Senior. This Research Brief includes 2017-2018 and 2018-2019 data on these six M-DCPS schools. Tables included in this report provide data on the number of IB examinations taken and the percentage of examinations receiving passing scores by subject area across all six M-DCPS IB schools, by school across all subject areas, and by school and ethnicity across all subject areas. The number and percentage of participating students earning diplomas in the District and at each IB school are also provided. The reader should note that results are not reported if fewer than 10 examinations were taken.

#### Participation in Examinations

- In 2018-2019, M-DCPS students took 3,133 IB examinations. The number of examinations taken by M-DCPS students increased by one percent from 3,108 taken in 2017-2018 as compared to 3,133 in 2018-2019.
- M-DCPS students took IB examinations in 26 subject areas in 2018-2019. Overall, most IB examinations were taken in Biology, English Literature, History, and Spanish B in 2018-2019. Over one-half (54%) of IB examinations taken by M-DCPS students were taken in these four subject areas.
- The greatest number of IB examinations were taken at Coral Gables Senior and Coral Reef Senior in 2018-2019 (882 and 849 examinations, respectively).
- From 2017-2018 to 2018-2019, the number of IB examinations taken increased at one of the six M-DCPS IB schools: Miami Beach Senior (a 5% increase in examinations taken).
   The number of IB examinations taken at the other four M-DCPS IB schools decreased.
- The District's Hispanic students took 68% of all IB examinations in 2018-2019. White students took 21% of IB examinations, Black students took 6%, and students classified as "Other" (Alaskan Native, American Indian, Asian, Pacific Islander, and Multiracial categories) took 5%.
- From 2017-2018 to 2018-2019, the percentage of examinations taken by Other and Black students decreased (by 9% and 6%, respectively); the percentage of examinations taken by White and Hispanic students increased by 8% and 10% respectively.

#### **Examination Results**

- Overall, the percentage of IB examinations receiving passing scores in M-DCPS decreased one percentage point from 80% in 2017-2018 to 79% in 2018-2019.
- The 2018-2019 subject areas in which the highest percentages of M-DCPS IB examinations received passing scores were English Literature, French B, Italian B, Portuguese B, Social and Cultural Anthropology, and Spanish B. The subject areas in which the lowest percentages of IB examinations received passing scores were Philosophy and Sports, Exercise, and Health Science.
- Coral Reef Senior, John A. Ferguson Senior, and Miami Beach Senior had the highest percentages of IB examinations receiving passing scores (94%, 76%, and 76%, respectively) in 2018-2019.
- From 2017-2018 to 2018-2019, the percentage of examinations receiving passing scores increased at three M-DCPS IB schools and decreased at three schools. The largest increase in the percentage of examinations receiving passing scores was at South Dade Senior (a 14 percentage point increase). Miami Beach Senior had the largest decrease in the percentage of examinations receiving passing scores (a 12 percentage point decrease).
- In 2018-2019, 77% of IB examinations taken by M-DCPS White students, 79% of examinations taken by Hispanic students, 72% of examinations taken by Black students, and 88% of examinations taken by students classified as "Other" received passing scores.
- From 2017-2018 to 2018-2019, the percentage of examinations receiving passing scores
  decreased by six percentage points for White students, decreased by two percentage
  points for Hispanic students, and increased for Black students by nine percentage points
  and students classified as "Other" by one percentage point.

#### **Diploma Results**

- Grade 12 students who were enrolled in the IB program, met all program requirements, and took the required examinations were eligible to receive IB diplomas. The number of M-DCPS students eligible to receive IB diplomas decreased by 19 students from 2017-2018 to 2018-2019.
- A total of 368 M-DCPS students, or 74% of eligible students, received IB diplomas at the conclusion of the 2018-2019 school year. The percentage of the District's eligible IB program students receiving an IB diploma decreased by three percentage points from 2017-2018 to 2018-2019.
- Of the six M-DCPS IB schools, Coral Reef Senior had the highest percentage of eligible students receiving IB diplomas (91%) in 2018-2019.

• From 2017-2018 to 2018-2019, the percentage of students receiving IB diplomas increased or remained the same at four of the six M-DCPS IB schools.

Table 1. Numbers of IB Examinations Taken and Percentages of IB Exams Passed by Subject Area, 2017-2018 and 2018-2019, M-DCPS, All IB Schools Combined

	# of Exam	s Taken	% of Exams Passed		
Subject Area	2017-2018	2018-2019	2017-2018	2018-2019	
Biology	333	363	57	55	
Business Management	20	11	75	82	
Chemistry	137	169	72	62	
Computer Science	12	1	58	N/A	
Dance	30	9	77	N/A	
English A Literature	516	502	93	95	
English B	0	0	N/A	N/A	
Film	17	13	82	92	
French AB	2	8	N/A	N/A	
French B	100	81	91	93	
Further Mathematics	0	0	N/A	N/A	
Geography	40	107	88	68	
German B	28	24	89	88	
History	470	484	90	89	
Information Technology in a Global Society	0	0	N/A	N/A	
Italian B	16	10	88	90	
Mathematical Studies	299	275	78	79	
Mathematics	202	254	58	48	
Philosophy	38	34	24	59	
Physics	16	31	50	68	
Portuguese B	3	11	N/A	100	
Psychology	255	227	77	81	
Social and Cultural Anthropology	56	42	100	100	
Spanish A Language & Literature	21	23	71	17	
Spanish A Literature	0	0	N/A	N/A	
Spanish AB	2	9	N/A	N/A	
Spanish B	365	354	96	97	
Sports, Exercise, and Health Science	58	0	38	N/A	
Theatre	23	27	57	67	
Visual Arts	10	18	50	44	
World Religions	39	46	87	89	
Total, All Subjects	3108	3133	80	79	

Table 2. Numbers of IB Examinations Taken and Percentages of Examinations Passed, by School, 2017-2018 and 2018-2019

	# of Exar	ns Taken	% of Exams Passed		
School	2017-2018	2018-2019	2017-2018	2018-2019	
Coral Gables Senior	908	882	81	74	
Coral Reef Senior	892	849	91	94	
John A. Ferguson					
Senior	640	545	78	76	
Miami Beach Senior	255	537	88	76	
North Miami Senior	176	101	63	73	
South Dade Senior	237	219	40	54	
Total, All IB Schools	3108	3133	80	79	

Table 3. Numbers of IB Examinations Taken and Percentages of Examinations Passed, By Ethnicity, 2017-2018 and 2018-2019

		Wh	iite	Bla	ack	Hisp	anic	Otl	ner
School		Number Taken	Percent Passed	Number Taken	Percent Passed	Number Taken	Percent Passed	Number Taken	Percent Passed
Coral Gables Senior	2019	129	71	29	69	701	75	23	78
	2018	155	76	27	70	679	83	47	79
Coral Reef Senior	2019	220	93	41	93	519	94	69	100
	2018	181	93	55	82	567	91	89	94
John A. Ferguson Senior	2019	29	76	18	56	456	76	42	81
	2018	21	81	31	77	560	78	28	82
Miami Beach Senior	2019	239	74	2	50	277	78	19	68
	2018	145	86	12	75	92	93	6	N/A
North Miami Senior	2019	0	N/A	82	68	18	94	1	100
	2018	0	N/A	142	59	28	82	2	N/A
South Dade Senior	2019	44	41	2	50	161	55	6	100
	2018	25	44	34	29	172	41	6	N/A
Total, All Schools	2019	661	77	174	72	2132	79	160	88
	2018	527	83	301	63	2098	81	178	87

Table 4. Numbers and Percentages of Students Receiving IB Diplomas, by School and M-DCPS Overall, 2017-2018 and 2018-2019

	Students Eligible Re		Number of Receiv Diplo	ing IB	Percent of Students Receiving IB Diplomas	
School	2017- 2018	2018- 2019	2017- 2018	2018- 2019	2017- 2018	2018- 2019
Coral Gables Senior	150	141	124	96	83	68
Coral Reef Senior	148	144	133	131	90	91
John A. Ferguson Senior	103	88	80	69	78	78
Miami Beach Senior	43	75	37	50	86	67
North Miami Senior	31	17	15	10	48	59
South Dade Senior	43	34	11	12	26	35
Total, All IB Schools	518	499	400	368	77	74

#### **Summary**

This Research Brief summarized the performance of M-DCPS students participating in the IB program. Six M-DCPS high schools offered the IB program and administered the corresponding IB examinations during the 2018-2019 school year: Coral Gables Senior, Coral Reef Senior, John A. Ferguson Senior, Miami Beach Senior, North Miami Senior, and South Dade Senior.

Over 3,000 examinations were taken by M-DCPS students in 26 subject areas in 2018-2019; the number of IB examinations taken in M-DCPS decreased slightly by one percentage point from 2017-2018 to 2018-2019. The greatest number of IB examinations were taken at Coral Gables Senior and Coral Reef Senior. Districtwide, 68% of IB examinations were taken by Hispanic students, 21% were taken by White students, 6% were taken by Black students, and 5% were taken by students classified as "Other."

The percentage of M-DCPS IB examinations receiving passing scores decreased by one percentage point to 79% from 2017-2018 to 2018-2019. Coral Reef Senior, John A. Ferguson Senior, and Miami Beach Senior had the highest percentages of IB examinations receiving passing scores. Students classified as "Other" had the highest percentage of IB examinations receiving passing scores in 2018-2019, followed by Hispanic students, White students, and Black students. From 2017-2018 to 2018-2019, the percentage of examinations receiving passing scores decreased by six percentage points for White students and by two percentage points for Hispanic students and increased by 9 percentage points for Black students and for "Other" students by one percentage point.

Overall, 74% of M-DCPS' eligible students received an IB diploma at the conclusion of the 2018-2019 school year. The percentage of eligible students earning an IB diploma decreased by three percentage points from 2017-2018 to 2018-2019. Of the six M-DCPS IB schools, Coral Reef Senior had the highest percentage of eligible students receiving IB diplomas in 2018-2019.